Leadership, Collaborative Management, and Innovation Toward Sustainable SDG Partnerships: Evidence from PT. XYZ

Ferdyan Hardinata [1]*, Dewi Nusraningrum [2]

[1] Universitas Mercu Buana, Jakarta, Indonesia.
[2] Universitas Mercu Buana, Jakarta, Indonesia.

Abstract: This study aims to examine the influence of leadership, collaborative management, and innovation on sustainable development goal (SDG) partnerships at PT. XYZ. In the context of increasing global competition and rapid technological advancement, sustainable partnerships are critical to achieving long-term business goals aligned with SDGs. Using a quantitative approach based on the positivist paradigm, data were collected through surveys distributed to 100 respondents from 30 partner organizations. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 3.0. The results indicate that leadership and collaborative management both have a significant and positive effect on sustainable partnerships. Moreover, innovation significantly mediates the relationship between both leadership and collaborative management with sustainable partnerships. The study contributes to the literature by emphasizing the role of organizational leadership, teamwork, and innovation in strengthening partnership performance for sustainability. Practical implications highlight the need for participatory leadership, accountable collaboration, and technologically supported innovation in achieving effective and inclusive partnerships.

Keywords: sustainable partnership, leadership, collaborative management, innovation, SDG

1. Introduction

In the era of globalization, companies are required to consistently enhance their performance and competitiveness. Sustainable partnerships have become a strategic necessity, particularly in technology-driven sectors such as telecommunications. PT. XYZ, as a major player, faces growing challenges in maintaining effective collaborations amidst rapid technological change and market competition from global firms like ZTE, Nokia, and Ericsson.

Table 1. Recent Partnership Data from PT. XYZ in 2024

No	Partners	Status		
		Active	Temporary	Not Active
1	PT TIP		√	
2	PT IND		√	
3	PT XA	√		
4	PT ST	√		
5	PT JT	√		
6	PT FM	√		
7	PT LN	√		
8	PT BTS	√		
9	PT CTI		√	
10	PT GTI		√	

No	Partners	Status		
		Active	Temporary	Not Active
11	PT VII		√	
12	PT IBS		√	
13	PT LCK GK		√	
14	PT PMP			√
15	PT STP		√	
16	PT TBI	√		
17	PT SMN		√	
18	PT DT			√
19	PT MII	√	√	
20	PT NTI	√		
21	PT KUM		√	
22	PT MML			√
23	PT MSL	√		
24	PT VGT		√	
25	PT PS		√	
26	PT NDS		√	
27	PT EIJ			√
28	PT IPA			√
29	PT NTA			√
30	PT DSG	√		
Total		**11**	**14**	**6**

Recent partnership data from PT. XYZ in 2024 shows only 11 active partners out of 30, with 14 categorized as temporary and 6 as inactive. This reflects a significant instability in collaboration, potentially undermining the company's long-term goals. Financial data further indicates a dip in revenue in 2022 before recovering in 2023, suggesting that sustainable partnerships contribute to financial resilience.

Internally, issues such as insufficient participatory leadership, unclear decision-making responsibilities, and limited innovation adoption hinder effective collaboration. Externally, evolving technologies and emerging competitors demand continuous innovation and adaptability.

To address these challenges, this study investigates the influence of leadership, collaborative management, and innovation on sustainable partnerships within the framework of the Sustainable Development Goals (SDGs). The objective is to provide strategic insights that support long-term partnership sustainability at PT. XYZ.

2. Literature Review

This study refers to various previous research related to leadership, collaborative management, innovation, and partnership performance to establish a strong theoretical foundation. These prior studies serve as comparative references, highlighting both similarities and differences in approach, methodology, and contextual application relevant to the SDG partnership framework at PT. XYZ.

Bass (1990) laid the groundwork for transformational leadership theory, asserting that leaders can inspire change by fostering innovation and collaboration toward common goals. This aligns with Wang and Ahmed (2004), who emphasized that leadership and organizational learning are key drivers of innovation performance. Savitri et al. (2021) also found that organizational innovation is positively influenced by visionary leadership and open

collaboration.

Brinkerhoff (2002) underlined the need for shared responsibility, sustained communication, and clearly defined roles to build sustainable partnerships. These principles support the dimensions of long-term commitment, shared goals, and sustainability values used in this study.

Syafitri and Nurhayati (2021) highlighted active participation as a central element in driving innovation in open organizational structures. Ramadhani et al. (2020) further demonstrated how co-creation between internal and external partners accelerates adaptive idea development, while Handayani and Fahmi (2023) emphasized the critical role of open collaboration in creating relevant digital solutions.

Rahmawati and Cholid (2022) showed that social interactions among collaborative team members directly influence their innovative productivity. Similarly, Prasetya and Damayanti (2023) found that cross-departmental initiatives like hackathons and open forums stimulate an inclusive culture of idea exploration.

Novitasari and Saputra (2021) discussed how cross-functional collaboration dissolves organizational silos and enhances speed and accuracy in decision-making. This is echoed by Yuliani and Wulandari (2020), who found that such collaboration facilitates faster digital development through shared competencies.

Setiawan and Hidayah (2019) argued that involving diverse organizational functions leads to the accumulation of tacit knowledge, which fuels innovation. Wardhana and Utami (2022) recommended that organizational leaders invest in collaborative communication infrastructure to support continuous ideation. Finally, Nugroho and Arifin (2023) concluded that sustainable innovation flourishes in ecosystems built on trust, transparency, and shared goals.

These references provide a robust scholarly foundation for the present study, which seeks to explore how leadership, collaborative management, and innovation affect sustainable SDG-oriented partnerships within the context of PT. XYZ.

3. Research Method

Research Design

This study employs a **quantitative research design** rooted in the **positivist paradigm**. According to Sugiyono (2019) and Apriliani (2024), quantitative methods are used to examine specific populations or samples by analyzing data collected through instruments such as questionnaires. The objective is to test predetermined hypotheses statistically and objectively. The chosen research method is **survey research**, which enables data collection in natural, non-manipulated environments. Although the setting remains natural, researchers implement controlled procedures such as distributing questionnaires, conducting limited observations, and collecting documentary evidence (Sugiyono, 2019; Barata, 2021a).

The research focuses on analyzing the influence of leadership, collaborative management, and innovation on sustainable partnerships aligned with Sustainable Development Goals (SDGs) at PT. XYZ.

Population and Sample

The population for this study consists of 133 representatives from 30 business partners affiliated with PT. XYZ. The **sample size** was determined using the **Slovin formula** at a 5% margin of error, yielding a total of **100 valid respondents**. Respondents were selected using **purposive sampling**, focusing on those actively involved in partnership coordination, decision-making, or innovation processes within their respective companies.

Data Collection Methods

To ensure robust data analysis, this study utilizes **both primary and secondary data** collection techniques.
   1. **Primary Data Collection**

Primary data was obtained directly from the respondents through the following methods:

- o **Observation**: The researcher conducted **non-participant observations** on PT. XYZ partner coordination activities, particularly focusing on collaborative practices, leadership interactions, and innovation implementation. These observations helped to validate the consistency between reported responses and actual practices (Sugiyono, 2019).
- o **Questionnaires**: A structured questionnaire was designed and distributed to respondents. The instrument was developed using statements aligned with the research variables, each measured using a **Likert scale** ranging from:
  - ▪ 1 = Strongly Disagree
  - ▪ 2 = Disagree
  - ▪ 3 = Neutral
  - ▪ 4 = Agree
  - ▪ 5 = Strongly Agree

  The questionnaire was tested for **validity and reliability** prior to distribution to ensure that each item accurately measured the intended construct (Sugiyono, 2019:142).

2. **Secondary Data Collection**
   Secondary data supports the analysis and includes:
   - o **Documentation**: Company-related records such as vision and mission statements, organizational structure, partnership performance reports, and financial summaries from 2021 to 2023 were examined. These records provided contextual information that helped in interpreting the quantitative results (Sugiyono, 2019; Hayati et al., 2020).
   - o **Literature Study**: A comprehensive review of relevant theories and past research was conducted to strengthen the theoretical framework. Literature sources include journal articles, textbooks, and previous studies that discuss leadership, collaboration, innovation, and sustainable partnerships (Sugiyono, 2019; Prof. Dr. Sugiyono, 2011).

Instrument Validity and Reliability Testing

Before distribution, the questionnaire was tested for:

- **Validity**: Using convergent and discriminant validity criteria, ensuring that each indicator accurately reflects its respective latent variable.
- **Reliability**: Internal consistency was assessed through **Cronbach's Alpha** and **Composite Reliability**. A threshold of ≥ 0.70 was used to confirm reliability.

Data Analysis Technique

The data was analyzed using **Partial Least Squares – Structural Equation Modeling (PLS-SEM)** via **SmartPLS Version 3.0**.
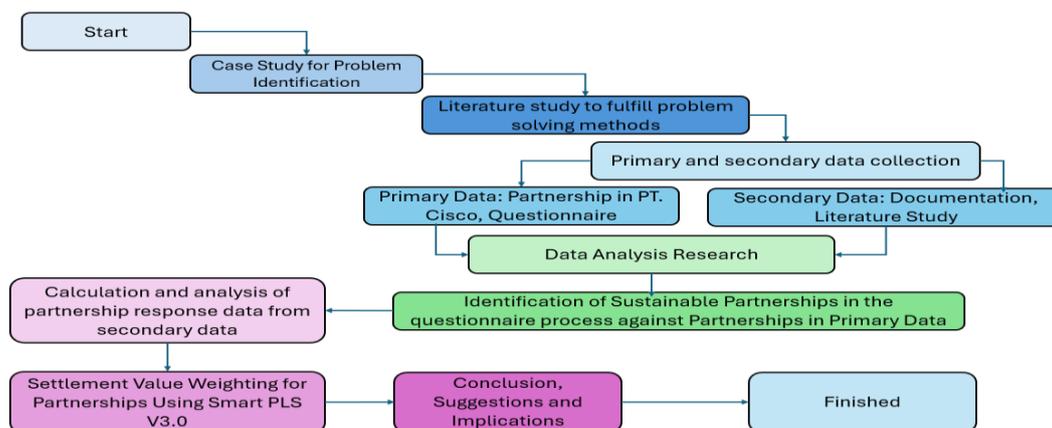

Figure 1. Research Flow

4. Results and Discussion

Descriptive Statistics Test

Table 2. Descriptive Variabel Results

Variable	N	Min–Max	Mean	Median	Std. Deviation	95% CI for Mean
Leadership	100	16 – 48	37.08	37.00	8.737	98.27 – 101.73
Collaborative Management	100	24 – 50	39.40	41.00	8.315	98.35 – 101.65
Innovation	100	12 – 40	29.69	30.00	7.677	98.48 – 101.52
Sustainable Partnership	100	12 – 40	34.46	35.50	5.373	98.93 – 101.07

Source: Processed Data using SmartPLS (2025)

The descriptive statistical analysis indicates that the highest average score was found in the Collaborative Management variable (Mean = 39.40), followed by Leadership (37.08), Sustainable Partnerships (34.46), and Innovation (29.69). The standard deviation was highest in the Leadership variable, suggesting a greater variability in respondents' perceptions regarding leadership practices. All variables show relatively close mean and median values, indicating a normal distribution of responses. The minimum and maximum scores across variables also reflect a wide range of responses, illustrating the diversity of respondent perceptions. Overall, the results suggest that respondents have a generally positive perception of leadership, collaboration, innovation, and sustainable partnership practices within PT XXXXX.

Data Analysis Results

a. Convergent Validity

1. Convergent Validity Test using Outer Loadings

Convergent validity was assessed through the outer loading values of each indicator in their respective constructs. According to Hair et al. (2017), an outer loading value of ≥ 0.70 indicates that the indicator has strong correlation with its latent construct and is therefore valid. The following table summarizes the loading factor results for each variable:

Table 3. Convergent Validity Test using Outer Loadings Results

Variable	Indicator	Loading Factor	Threshold	Result
Leadership (KPM)	K.1 – K.10	0.793 – 0.857	≥ 0.70	Valid
Collaborative Management (MK)	MK.1 – MK.10	0.788 – 0.829	≥ 0.70	Valid
Innovation (INV)	I.1 – I.8	0.761 – 0.866	≥ 0.70	Valid
Sustainable Partnership (KM)	KM.1 – KM.8	0.772 – 0.818	≥ 0.70	Valid

Source: Processed Data using SmartPLS (2025)

All indicators exceed the minimum threshold of 0.70, confirming that each indicator contributes significantly to its respective construct. Thus, the measurement model meets the requirements for convergent validity and is suitable for further analysis in the structural model.

2. Convergent Validity Test using *Average Variance Extracted* (AVE)

Average Variance Extracted (AVE) is used to assess the level of convergent validity at the construct level. An AVE value greater than 0.50 indicates that more than 50% of the variance in the indicators is explained by the

latent variable, thereby confirming acceptable convergent validity (Hair et al., 2017). The AVE values for each variable are as follows:

Table 4. Convergent Validity Test using AVE

Variable	(AVE)	Threshold	Result
Leadership (KPM)	0.678	> 0.50	Valid
Collaborative Management (MK)	0.650	> 0.50	Valid
Innovation (INV)	0.671	> 0.50	Valid
Sustainable Partnership (KM)	0.627	> 0.50	Valid

Source: Processed Data using SmartPLS (2025)

The results show that all constructs have AVE values above 0.50, indicating that each construct explains the majority of the variance in its indicators. Therefore, the model satisfies the convergent validity criteria at the construct level.

b. Discriminant Validity

1. Discriminant Validity Test Using Outer Loadings

Table 5. Cross Loadings for Discriminant Validity

Indicator	Leadership (X1)	Collaborative Management (X2)	Innovation (Z)	Sustainable Partnership (Y)
K.1	0.857	0.425	0.575	0.537
K.2	0.802	0.404	0.561	0.448
K.3	0.793	0.405	0.486	0.402
K.4	0.803	0.391	0.552	0.503
K.5	0.831	0.413	0.513	0.558
K.6	0.827	0.484	0.595	0.625
K.7	0.838	0.453	0.598	0.502
K.8	0.827	0.479	0.583	0.545
K.9	0.827	0.404	0.51	0.443
K.10	0.828	0.383	0.505	0.470
MK.1	0.473	0.799	0.500	0.537
MK.2	0.465	0.811	0.555	0.527
MK.3	0.448	0.804	0.507	0.532
MK.4	0.445	0.793	0.479	0.485
MK.5	0.396	0.813	0.543	0.601
MK.6	0.396	0.816	0.648	0.519
MK.7	0.377	0.829	0.524	0.585
MK.8	0.382	0.788	0.475	0.469
MK.9	0.471	0.807	0.524	0.502
MK.10	0.322	0.800	0.475	0.466
L1	0.605	0.577	0.833	0.659

L2	0.523	0.526	0.851	0.542
L3	0.591	0.601	0.861	0.647
L4	0.541	0.442	0.804	0.549
L5	0.501	0.535	0.807	0.602
L6	0.522	0.489	0.762	0.493
L7	0.501	0.505	0.761	0.426
L8	0.580	0.465	0.866	0.655
KM.1	0.485	0.517	0.441	0.775
KM.2	0.461	0.566	0.542	0.802
KM.3	0.502	0.482	0.582	0.818
KM.4	0.507	0.499	0.484	0.784
KM.5	0.51	0.514	0.584	0.799
KM.6	0.48	0.527	0.51	0.789
KM.7	0.468	0.538	0.567	0.796
KM.8	0.492	0538	0.712	0.772

Source: Processed Data using SmartPLS (2025)

The cross loadings analysis was performed to evaluate the discriminant validity of the measurement model. Discriminant validity is established when each indicator shows the highest loading on its respective construct compared to its loadings on other constructs.

Based on the results presented in the cross loadings table, the following conclusions can be drawn:

- **Leadership indicators (K.1–K.10)** demonstrated the highest loading values on the Leadership (X1) construct, with values ranging from 0.793 to 0.857, confirming their validity in measuring leadership.
- **Collaborative Management indicators (MK.1–MK.10)** also showed the strongest loadings on the **Collaborative Management (X2)** construct, with all values exceeding the threshold of 0.70.
- **Innovation indicators (I.1–I.8)** loaded highly on the Innovation (Z) construct, with loading values between 0.761 and 0.866, indicating high reliability and discriminant validity.
- **Sustainable Partnership indicators (KM.1–KM.8)** had the highest loading values on the **Sustainable Partnership (Y)** construct, with values from **0.**712 to 0.802, meeting the required validity standards.

In addition, none of the indicators showed higher loadings on other constructs than on their assigned latent variable. This confirms that all constructs are empirically distinct, and thus, the model meets the discriminant validity requirement using the cross-loading criterion (Hair et al., 2017).

2. Discriminant Validity Test Using Fornell-Larcker

Table 6. Fornell-Larcker Criterion Values of Research Variables

Variable	Innovation (Z)	Sustainable Partnership (Y)	Leadership (X1)	Collaborative Management (X2)
Innovation (Z)	**0.819**			
Sustainable Partnership (Y)	0.705	**0.792**		
Leadership (X1)	0.668	0.617	**0.823**	
Collaborative Management (X2)	0.659	0.651	0.518	**0.806**

Source: Processed using SmartPLS (2025)

According to the results in Table 6, the square root of the AVE (Average Variance Extracted) for each construct is greater than its correlation with any other construct. This satisfies the Fornell-Larcker criterion, indicating that the model possesses good **discriminant validity**. Each construct is empirically distinct from the others and reliably measures its intended dimension.

Table 7. HTMT Results of Research Variables

Variable	Innovation (Z)	Sustainable Partnership (Y)	Leadership (X1)	Collaborative Management (X2)
Innovation (Z)	—			
Sustainable Partnership (Y)	0.749	—		
Leadership (X1)	0.707	0.656	—	
Collaborative Management (X2)	0.696	0.696	0.546	—

Source: Processed using SmartPLS (2025)

Table 7 shows that all HTMT (Heterotrait-Monotrait Ratio) values are below 0.90, indicating that each construct in the model satisfies the criteria for discriminant validity. These results confirm that the latent constructs are empirically distinct from one another and that the model has acceptable construct validity in terms of inter-variable relationships.

c. Reability Tests

Table 8. Results of Cronbach's Alpha and Composite Reliability

Variable	Cronbach's Alpha	Composite Reliability
Innovation (Z)	0.930	0.942
Sustainable Partnership (Y)	0.915	0.931
Leadership (X1)	0.947	0.955
Collaborative Management (X2)	0.940	0.949

Source: Processed using SmartPLS (2025)

Based on the results presented in Table 8, the **Cronbach's Alpha** and **Composite Reliability** values for all constructs exceed the minimum threshold of **0.70**. This indicates that all constructs demonstrate **strong internal consistency reliability,** confirming that the measurement model used in this study meets the required standards for reliability.

d. Predictive Relevance (Q²)

The Predictive Relevance (Q^2) test is used to validate the predictive capability of a model. A Q^2 value greater than 0 indicates that the model has good predictive relevance, whereas a value less than 0 suggests that the model lacks predictive relevance (Rianto Rahadi, 2023). The calculation of the Q^2 value in this study is as follows:

$Q^2 = 1 - (1 - 0.580)(1 - 0.585)$
$Q^2 = 1 - (0.420)(0.415)$
$Q^2 = 1 - 0.174$
$Q^2 = 0.826$

Note:

R^2_1 = Coefficient of determination for **Innovation (Z)**
R^2_2 = Coefficient of determination for **Sustainable Partnership (Y)**
The Q² value of **0.826** indicates that the structural model in this study possesses **strong predictive relevance** (Q² > 0). This means that the exogenous latent variables used in the model are capable of accurately predicting the endogenous variables.

e. Goodness of Fit (GoF)

The Goodness of Fit (GoF) test is used to validate the combined performance of the measurement model (outer model) and the structural model (inner model). The GoF value criteria are as follows: 0.10 = Small, 0.25 = Medium, and 0.36 = Large (Rianto Rahadi, 2023). The results of the Goodness of Fit (GoF) test in this study are as follows:

$$\text{Gof} = \sqrt{AVE \; x \; R^2}$$
$$\text{Gof} = \sqrt{0{,}657 \; x \; 0{,}583}$$
$$\text{Gof} = \sqrt{0{,}518} = 0{,}720$$

Note:

AVE = (0.678 + 0.650 + 0.671 + 0.627) / 4 = 0,657
R^2 = (0.580 + 0.585) / 2 = 0,763

The result of the Goodness of Fit (GoF) calculation yielded a value of 0.763. This indicates that the combined performance of the measurement model (outer model) and the structural model (inner model) in this study falls into the large category, as the GoF value exceeds 0.36 (0.763 > 0.36). Thus, the model demonstrates a strong overall fit and is considered robust in explaining the observed data.

f. Hypothesis Testing Results

Table 9. Hypothesis Testing Results

Hypothesis	Original Sample	T Statistic	P Value	Conclusion
Direct Effects				
Leadership (X1) → Sustainable Partnership (Y)	0.221	2.275	0.023	Positive Significant
Collaborative Management (X2) → Sustainable Partnership (Y)	0.299	2.761	0.006	Positive Significant
Leadership (X1) → Innovation (Z)	0.447	4.040	0.000	Positive Significant
Collaborative Management (X2) → Innovation (Z)	0.427	4.108	0.000	Positive Significant
Innovation (Z) → Sustainable Partnership (Y)	0.361	2.779	0.006	Positive Significant
Indirect Effects (Mediation)				
Innovation (Z) mediates Leadership (X1) → Sustainable Partnership (Y)	0.162	2.487	0.013	Positive Significant
Innovation (Z) mediates Collaborative Management (X2) → Sustainable Partnership (Y)	0.154	2.183	0.030	Positive Significant

Source: Processed using SmartPLS (2025)

H1: Leadership has a positive and significant effect on Sustainable Partnerships

The analysis shows that Leadership has a positive and significant effect on Sustainable Partnership, with a path coefficient of 0.221, a T-statistic of 2.275, and a p-value of 0.023. This result supports the idea that effective leadership particularly the ability to foster cooperation and build relationships contributes significantly to the continuity of partnerships. This finding aligns with Ye et al. (2022), who emphasized the role of leadership empowerment in enhancing organizational outcomes.

H2: Collaborative Management has a positive and significant effect on Sustainable Partnerships

Collaborative Management positively affects Sustainable Partnership with a coefficient of 0.299, T-statistic of 2.761, and p-value of 0.006. This suggests that when management fosters mutual respect and inclusive participation, it strengthens partnership sustainability. These findings support the conclusions of Wildan Rayadi (2020), who highlighted the importance of collaboration among stakeholders in sustaining environmental initiatives.

H3: Leadership has a positive and significant effect on Innovation

Leadership also has a strong and significant impact on Innovation, with a path coefficient of 0.447, T-statistic of 4.040, and p-value of 0.000. This indicates that leadership encourages innovation, especially through task delegation and participative direction. This is in line with the findings of Novitasari et al. (2021), where leadership is seen as a driving factor in fostering knowledge-based innovation.

H4: Collaborative Management has a positive and significant effect on Innovation

The relationship between Collaborative Management and Innovation is significant, with a path coefficient of **0.427**, T-statistic of 4.108, and p-value of 0.000. It implies that active collaboration enhances innovation capability within the organization. Barata (2021) also notes that effective collaboration management involves strategic implementation that drives innovation.

H5: Innovation has a positive and significant effect on Sustainable Partnerships

Innovation exerts a positive and significant effect on Sustainable Partnership, with a coefficient of 0.361, T-statistic of 2.779, and p-value of 0.006. This result demonstrates that innovative practices help organizations adapt and remain competitive in long-term partnerships. This supports the study by Basuki (2023), which emphasizes innovation as a critical factor in achieving organizational sustainability.

H6: Innovation mediates the relationship between Leadership and Sustainable Partnerships

The indirect effect of Leadership on Sustainable Partnership via Innovation is significant, with a coefficient of 0.162, T-statistic of 2.487, and p-value of 0.013. This shows that innovation acts as a partial mediator, reinforcing the impact of leadership on sustainable collaboration. This pathway highlights how leadership indirectly enhances partnership through fostering innovative initiatives, echoing findings by Ye et al. (2022).

H7: Innovation mediates the relationship between Collaborative Management and Sustainable Partnerships

Similarly, Innovation mediates the relationship between Collaborative Management and Sustainable Partnership, with a coefficient of 0.154, T-statistic of 2.183, and p-value of 0.030. This indicates that innovation strengthens the effect of collaborative practices on sustainable outcomes. These findings are consistent with Ramadhani & Madani (n.d.), who noted that collaboration supported by innovation plays a critical role in realizing SDG-based partnerships.

5. Conclusion and Recommendations

Conclusion

Based on the results of hypothesis testing and discussion regarding the influence of Leadership, Collaborative Management, and Innovation on Sustainable Partnerships for the SDGs at PT. XYZ, the following conclusions can be drawn in line with the stated research problems:

1. Leadership has a positive and significant effect on Sustainable Partnerships, with the "Ability to Foster Cooperation and Good Relationships" being the strongest contributing dimension, while "Participative Leadership" was the lowest.
2. Collaborative Management also positively and significantly affects Sustainable Partnerships. The strongest dimension is "Mutual Respect Among Group Members", whereas "Participative Responsibility" scored the lowest.
3. Leadership positively and significantly influences Innovation. The "Ability to Delegate Tasks or Authority" is the strongest dimension, while "Participative Leadership" remains the weakest.
4. Collaborative Management has a significant positive effect on Innovation. Interestingly, "Active Participation" was both the strongest and weakest dimension, indicating disparity in its implementation.
5. Innovation has a positive and significant impact on Sustainable Partnerships. The dimension of "Compatibility" was the strongest, while "Relative Advantage" was the lowest.
6. Innovation serves as a significant mediating variable in the relationship between Leadership and Sustainable Partnerships, further strengthening the link between organizational direction and collaborative outcomes.
7. Innovation also significantly mediates the relationship between Collaborative Management and Sustainable Partnerships, demonstrating its role as a bridge that connects internal management practices with sustainable external relations.

Recommendations

Based on the research results and practical implications observed throughout the study, the following recommendations are proposed for PT. XYZ and similar organizations aiming to strengthen sustainable partnerships within the SDG framework:

1. **Develop Inclusive Leadership Training Programs:**
   Given the low score on participative leadership, it is recommended that the organization invests in structured leadership development programs focusing on inclusivity, empowerment, and employee engagement. Training modules should include decision-sharing, listening skills, and collaborative leadership styles to foster a culture of openness and mutual respect both internally and externally.
2. **Institutionalize Collaborative Decision-Making Mechanisms:**
   To address weaknesses in participative responsibility, organizations should institutionalize cross-functional teams, decision-making councils, and clearly defined roles within partnership agreements. This structure will help reduce ambiguity, improve trust among stakeholders, and accelerate the implementation of partnership initiatives related to SDGs.
3. **Promote Innovation Awareness and Adoption:**
   Since the relative advantage of innovation was rated low, a strong recommendation is to improve internal communication about the benefits of innovation and provide real-world use cases that illustrate long-term value creation. Innovation should not only be encouraged but also monitored for effectiveness, with performance indicators tied to sustainability outcomes.
4. **Enhance Technological Infrastructure to Support Innovation:**
   It is essential for PT. XYZ to invest in digital technologies such as data analytics platforms, cloud-based collaboration tools, and IoT integration to facilitate innovation scalability. These technologies can significantly improve efficiency, increase transparency with partners, and help measure sustainability metrics in real-time.
5. **Strengthen External Engagement in Partnership Building:**
   Building a sustainable partnership requires more than internal readiness. The organization should actively engage partners in co-creation, joint strategic planning, and innovation workshops. This mutual engagement reinforces shared commitment and ensures alignment with SDG values across stakeholders.

6. **Integrate Sustainability Goals into Organizational Culture:**
   Finally, to achieve long-term impact, sustainability must become part of the organization's identity. This includes embedding SDG-related objectives into employee performance indicators, partnership evaluation criteria, and innovation portfolios.

References

1. Apriliani, R. (2024). *Research methodology in business*. Jakarta: Akademika Press.
2. Barata, Y. (2021a). Manajemen strategi FAB Enterprises dalam membangun kolaborasi bisnis. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 7(1), 96–105.
3. Basuki, R. (2023). Mengoptimalkan modal manusia: Strategi manajemen sumber daya manusia yang efektif untuk pertumbuhan organisasi yang berkelanjutan. *Komitmen: Jurnal Ilmiah Manajemen*, 4(2), 182–192.
4. Brinkerhoff, J. M. (2002). Government–nonprofit partnership: A defining framework. *Public Administration and Development*, 22(1), 19–30.
5. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.
6. Handayani, R., & Fahmi, R. (2023). Open collaboration and digital innovation: Toward a responsive service model. *Journal of Public Innovation*, 2(3), 101–110.
7. Hayati, S., Utami, L., & Nugroho, H. (2020). Pengaruh komitmen organisasi dan motivasi kerja terhadap kinerja guru. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 5(2), 100–111.
8. Nugroho, D., & Arifin, A. (2023). Building innovation ecosystems for sustainability: A trust-based approach. *Journal of Innovation and Management*, 6(1), 88–95.
9. Novitasari, D., & Saputra, R. (2021). Kinerja inovasi di era revolusi industri 4.0: Analisis knowledge-oriented leadership dan kapabilitas manajemen pengetahuan. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1245–1260.
10. Prasetya, A., & Damayanti, N. (2023). Empowering innovation through cross-departmental collaboration. *International Journal of Organizational Innovation*, 9(1), 77–89.
11. Ramadhani, M., & Madani, S. (n.d.). Analisis kemitraan dalam mewujudkan Sustainable Development Goals (SDGs) di Desa Biringala Kecamatan Barombong Kabupaten Gowa. *Kajian Ilmiah Mahasiswa Administrasi Publik (KIMAP)*, 3(6), 1815–1831.
12. Rahmawati, R., & Cholid, A. (2022). Collaborative teams and innovation performance: The mediating role of trust. *Journal of Human Capital and Innovation*, 11(2), 134–145.
13. Rianto Rahadi. (2023). *Structural equation modeling dengan SmartPLS 4.0*. Jakarta: Media Ilmiah Nusantara.
14. Savitri, D., Hidayat, T., & Kurniawan, Y. (2021). Visionary leadership and innovation performance: A study in tech-based SMEs. *Indonesian Journal of Business Research*, 5(3), 113–126.
15. Setiawan, F., & Hidayah, L. (2019). Building collaborative advantage: The role of cross-functional integration. *Journal of Strategic Management*, 3(2), 48–62.
16. Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
17. Syafitri, S., & Nurhayati, T. (2021). The impact of participative work environments on innovation capability. *Journal of Human Resource and Organization*, 4(1), 43–58.
18. Wang, C. L., & Ahmed, P. K. (2004). The development and validation of the organizational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management*, 7(4), 303–313.
19. Wardhana, T., & Utami, D. (2022). Strengthening innovation through collaborative communication infrastructure. *Asian Journal of Management Research*, 10(1), 64–78.
20. Wildan Rayadi. (2020). Manajemen kolaborasi dalam pengelolaan lingkungan untuk mewujudkan pabrik semen ramah lingkungan. *Jurnal Green Growth dan Manajemen Lingkungan*, 8(1), 24–37.
21. Ye, P., Liu, L., & Tan, J. (2022). Creative leadership, innovation climate and innovation behavior: The moderating role of knowledge sharing in management. *European Journal of Innovation Management*, 25(4), 1092–1114.
22. Yuliani, L., & Wulandari, S. (2020). Kolaborasi fungsional dalam percepatan pengembangan digital. *Jurnal Transformasi Digital*, 2(2), 55–66.